

NEVILLE WILLIAMS: WRITER, EDITOR & MENTOR

His name has been so closely associated with this magazine, for so many years, that it's hard to grasp that the man himself is suddenly no longer with us. Yet in the 55 years that he worked on the magazine, he rarely allowed himself to step into the spotlight. Almost always, his satisfaction came from quietly helping both his colleagues and readers *understand* about the many and changing facets of electronics. Here then is our tribute to the man himself — magazine editor, technical writer and author, educator, project designer and radio amateur, and pillar of his church.

Walter Neville Williams was born on 17th August, 1915 in Orange, NSW. In the early 1920's his parents moved the family to the tiny village of **Bargo**, in the southern highlands region of NSW (about 70km south-west of Sydney). It was here that young Neville (he preferred his second name) grew up, on a typical rural **farmlet**.

Although nowadays **Bargo** is barely an hour's drive from Sydney, in those days it was very much a remote rural community. Until the arrival of radio broadcasting, virtually the only links with the 'big smoke' were the steam trains which passed nearby, on the main southern railway.

About the only contact that young Neville had with anything technical was via his maternal grandfather **Alma** ('AW') Hicks, who ran the local motor garage and workshop. The inventive Mr Hicks had also built a community hall-cum-silent picture show, complete with a DC electric lighting plant whose batteries were charged via a stationary petrol engine, and this electricity supply had been extended to neighbouring shops and homes.

As Neville himself wrote, 'Pa' Hicks became a role model for his mechanically-minded grandson, encouraging him to take an interest in matters technical and showing him that understanding and solving technical problems could be both challenging and satisfying.

Later he recalled that another key event in his young life, with relevance to his later career, was in the 1920's when his parents bought their first 'wireless set'. It was a four valve **Colmovox**, like most other receivers of the period operated from large and smelly batteries.

When the time came to move on from the local primary school, Neville was enrolled at **Parramatta High School** and began five years of commuting back and forth every **school day** by steam train. It was a long and tedious trip, but now and

again a little innocent 'skylarking' made the time pass faster — like fitting a half-penny coin under one of the low voltage light bulbs in the train carriage, so it would blow the fuse when someone tried to switch on the lights at dusk...

Of course there were also plenty of opportunities to complete homework and catch up on reading. The end result was that he did well in his studies, was appointed a school prefect in his final year, and graduated at the end of 1932 with a good Leaving Certificate and some glowing character references.

At **Parramatta High**, thanks to the enthusiasm of one of his teachers, his interest in wireless had been rekindled during the final year. Under the guidance of Mr **Baldock** he built his very own crystal set, and was 'bitten by the radio bug'.

Once the Leaving Certificate was behind him, it was therefore understandable that Neville was keen to find a job in the radio industry. And his wish was soon granted, when in 1933 he was accepted for a position at **Reliance Radio**, a small but dynamic manufacturer of radio receivers located in **Barrack Street**, in Sydney. Initially he was a 'junior wirer', but his initiative and thirst for knowledge soon resulted in rapid promotion to the test bench as a senior technician, and he gained a great deal of experience in receiver production, testing and servicing. Work on the top-of-the-range 'York' receiver also began to develop in him an interest in high quality audio reproduction.

Soon after Neville had begun working at **Reliance**, his family moved to the Sydney suburb of **Guildford**, and established strong links with the Baptist churches at **Guildford** and **Merrylands**. Thus began Neville's own deep involvement with the **Merrylands Baptist Church**, which covered well over 40 years and included roles as deacon, organist, Sunday School Superintendent

and Family Night organiser.

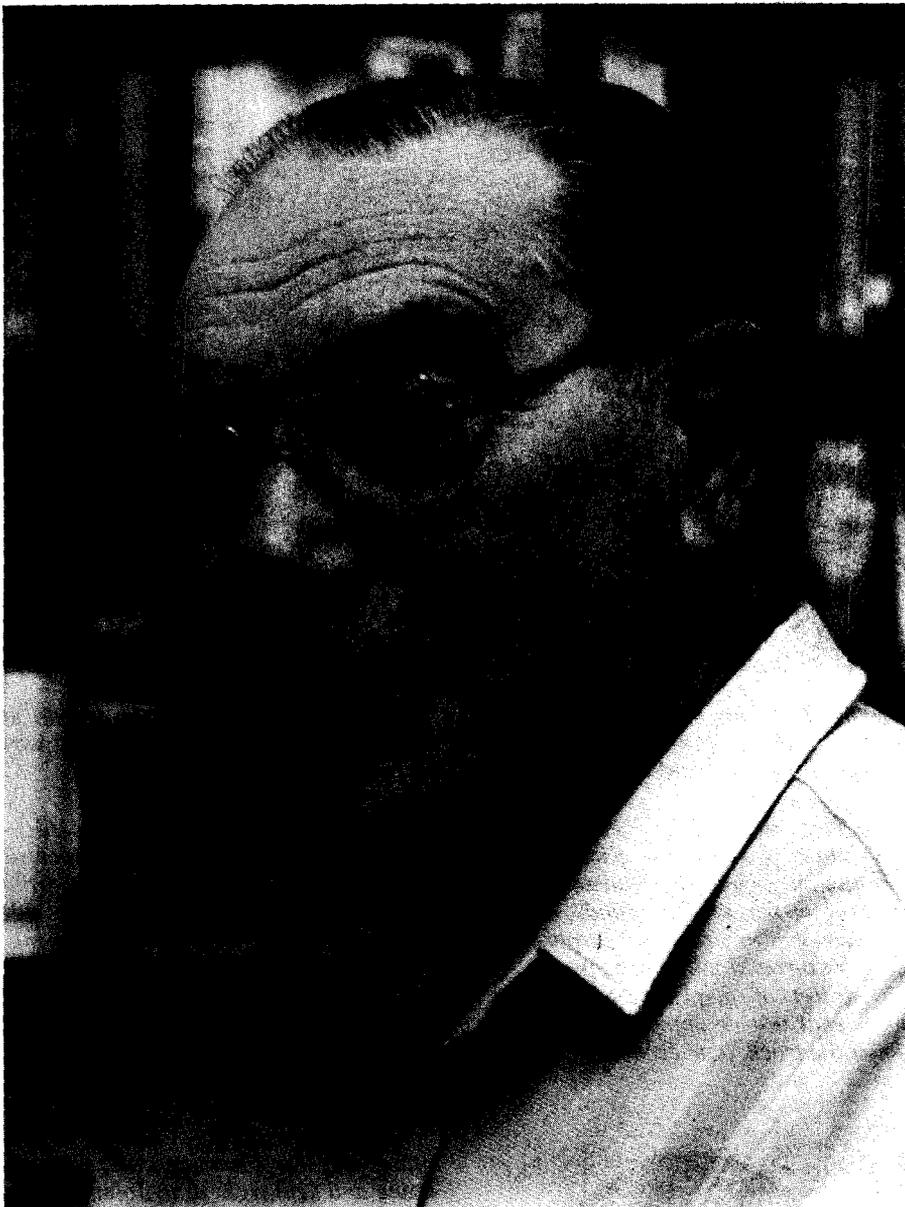
Late in 1935, **Reliance Radio** had a difficult technical problem with the then-new 6L6 output valves. A call to valve supplier **AWV** (the Amalgamated Wireless Valve Company, an AWA offshoot) resulted in that company's chief applications engineer **Fritz Langford-Smith** ('**FLS**') paying them a visit, to see the problem for himself and offer his expert advice.

The interest and enthusiasm of young Neville Williams must have caught the attention of **Langford-Smith**, because before long (in 1936) he was invited by **FLS** to join the staff of **AWV's** valve applications laboratory, at the **AWA** works in **Ashfield**. Both there, and later at the **AWV** lab in **AWA's** head office building in **York Street** as **Langford-Smith's** personal assistant, he acquired a deep and comprehensive knowledge of thermionic valves and their operation.

Valve technology was progressing in leaps and bounds at this time, and Neville was working with one of the acknowledged pioneers. The team produced valve data sheets to guide designers, and also ***Radiotronics***, a monthly technical bulletin giving detailed valve applications data.

In 1938, during this time at **AWV**, Neville and his sweetheart **Min Henderson** were married. After a short time in a rented cottage, they moved into and began buying a house in **Manchester Street**, **Merrylands**. Here they made a home for many years, and raised two children — **Greg** and **Jenny**.

In the **AWV** applications lab Neville found himself drawing many of the circuits and graphs for ***Radiotronics***, and also became deeply involved in the production of the much-expanded third edition of the ***Radiotron Designer's Handbook*** (published in 1940), which like its successor the fourth edition (1952) was to become famous and reprinted around the



Neville Williams as many of us will remember him. This picture was taken early in his retirement, as he worked on an article for the magazine.

world. Nowadays the *RDH* is regarded as an undoubted 'classic' among electronics reference books.

In 1939, Neville was asked by FLS to prepare and present a series of six technical lectures for radio servicemen. These were very well received, and were subsequently published as booklets. He also gave some lectures to students of the Marconi School of Wireless. In 1940 he prepared and presented a course of five lectures to signals trainees of the Australian Army's Eighth Division, based at **Ingleburn** in NSW. Then in 1941 he wrote some articles for the trade journal *ERDA*, on 'Multiband Superheterodyne Receivers', and also prepared a series of

theory **articles** for the new magazine *Radio & Hobbies*.

By this stage the name Neville Williams and the initials 'WNW' had quietly become known and respected among a wide circle of Australia's radio designers, service technicians and serious enthusiasts, for his clear technical writing and informative lectures.

In at the deep end!

Largely as a result of the articles he produced for the fledgling *Radio & Hobbies*, Neville became friends with John Moyle, its then editor. Moyle himself had joined *Wireless Weekly*, the precursor of *R&H*, in 1932, and since then had built up a wide reputation as a

writer, editor, radio amateur, designer and builder of many very popular radio receivers, amplifiers and amateur radio transmitter designs.

Australia was by then involved in the War, and later in 1941, John Moyle decided to join the RAAF as a radar instructor. But he wanted the magazine to survive and flourish in the meantime, and immediately thought of his new friend Neville Williams. Would Neville be prepared to leave his secure position at AWW, to join the magazine — both as its Technical Editor, and also as Acting Editor for the duration of the War?

Neville recounted much later that he almost didn't accept the invitation, but after giving it considerable thought he finally did so. Thus in December 1941 he began his long 'official' career in technical journalism, although clearly he had already begun semi-officially at AWW.

It was very much a case of being 'thrown in at the deep end', though, because no sooner had he arrived at the *R&H* office in the Associated Newspapers building in Elizabeth Street, than John Moyle was shaking his hand, wishing him well and departing for the RAAF. Neville was left almost alone to 'mind the baby', until **John Moyle returned at the end of the War — and with resources that were a far cry from the laboratory he'd worked in at AWW...**

In an article he wrote for our April 1989 issue, he described the magazine's modest technical facilities at the time:

We were very much on our own in the organisation, with a workbench, a soldering iron, a few hand tools and a steel cupboard containing an odd assortment of left-over wireless bits and pieces. By way of test equipment, the department boasted a Weston multimeter and a Paton modulated oscillator — the latter probably acquired following its review in the August 1939 issue. That was all!

What a contrast to the AWW lab, with its quality control equipment, its own array of individually calibrated reference meters in traditional polished wooden cases, and routine access to any amount of other equipment from elsewhere in the Ashfield complex...

Apart from advertising manager 'Pop' Morse and editorial manager Jack Lillis, his only link with the magazine's immediate past was a young assistant, Charles Birchmeier. But they got stuck into it, between them producing a couple of projects (one a simple PA amplifier) and finally managed to finish the February 1942 issue and send it away for printing.

Much later, he noted that it was all rather different from what he'd been

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used to at the AWV lab, and the change of working 'climate' had not been easy. Even writing the leader or 'editorial' took a fair degree of adjustment, as he described:

At AWV, I neither learned nor practised the art of writing an editorial. As with most other such companies, manuals were concerned strictly with unembellished facts — compiled by an anonymous writer for persons unknown.

Indeed, I later came to realise that a good magazine writer is the very antithesis of someone trained to compile technical manuals. An effective writer must do more than merely present facts; in the process, he or she must also motivate interest and communicate with the targetted readers.

Jack Lillis told him his first leader read 'like a new year message from one of the local archbishops' — and as a result he replaced it with an advertisement. But he persevered for the next issue, mastering the style and from that point on never missing a leader until he passed on the editorial baton, many years later.

With only Birchmeier's assistance and the help of a shared typiste, Neville produced *Radio & Hobbies* every month for the next four years, until John Moyle's return. This involved not only designing, building and writing about a string of radio receivers, amplifiers and other equipment, but also all of the other jobs of a magazine editor: chasing up material from the regular contributors, sub-editing their articles, organising photography, laying out the articles and issues, proof reading and so on.

It was a huge workload, but also a great situation in which to learn and master new skills. By the time John Moyle returned, Neville Williams was an experienced and highly capable technical magazine writer and editor — as well as a very efficient and innovative designer/builder of radio and audio construction projects.

When John Moyle *did* return, though, the magazine really 'took off'. The circulation rose dramatically, largely as a result of their combined skills, interests and energies. The time was right, too, because wartime restrictions were lifted and there were also a huge number of people returning to 'civvy street', many of them keen to either renew their existing hobby involvement, or build upon new skills they had acquired in the armed forces.

As Neville wrote later, there was ...a



Neville Williams shown farewelling his friend and colleague John Moyle at Sydney's Kingsford-Smith International airport, in 1956. At the time John was leaving for an around-the-world factfinding tour.

huge backlog of ordinary receivers to be built; an urge to come to grips with better quality sound reproduction; a re-opening of the amateur bands, and the promise of a 'mountain' of surplus components through military disposals; the possibility of acquiring or building some real test equipment; and, further down the track, tape recording, a vastly

improved disc format and television!

Far from being a daunting prospect, it was like a 'bunch of carrots' out front — exasperating only because one couldn't tackle everything at once. I'm not exaggerating to say that John and I, along with our newly recruited staff members, were like overgrown kids in a toyshop — incredulous that somebody was willing to pay us wages to pursue our collective hobby!

We worked during the day in the office and, for the most part, went off home and kept right at it. John set up a ham shack and workshop in a spare(?) bedroom where, amongst other things, he spent countless hours grinding and etching crystals. I had a desperately overcrowded 'shack' in the backyard. Hifi gear dominated our respective living rooms.

Together they were extremely productive, and month after month the magazine presented a seemingly endless procession of innovative designs for DIY radio receivers, amplifiers, amateur radio gear, test instruments, and audio recorders — first of the disc variety, and later using magnetic tape. And as new technology appeared, they kept spurring each other onward, to both master it and present both articles and projects to help their readers do likewise.

When the Federal Government decided in 1955 that television broadcasting would begin in Australia in 1957, both Neville and John Moyle began reading



One of the pictures which made Neville Williams instantly recognizable to countless 'Radio & Hobbies', 'R, TV & H' and 'Electronics Australia' readers, over his 55 years with the magazine.

up on the technology and planning construction projects. In July 1955, Neville presented a lecture to the Sydney Division of the IRE entitled 'The Elements of Modern Television', which attracted a record attendance of members and visitors and was later nominated as one of the best lectures ever presented to the Division.

He also began writing a very popular series of theory articles entitled 'A Course in Television', the first chapter appearing in the September 1955 issue of the magazine (by now renamed *Radio, Television and Hobbies*).

As Neville recounted later, he and John soon became engaged in a 'two-horse race', to see who could develop the first working TV receiver design suitable for home construction. Their first approaches involved using 5" and 6" ex-radar tubes with green phosphors, and with circuitry involving a surprising number of disposals valves (they were very cheap). It was a while before either came up with complete receiver designs, but a collection of experimental circuit ideas appeared in the December 1956 issue, and a description of a VHF tuner appeared in the following March issue.

Neville himself came up with the first complete TV receiver design, a 17" model which appeared in the May-July 1957 issues. John followed hard on his heels with a complete 5" design, in the September-October issues. Both were developed before regular TV broadcasting began, that September — so both designers had to make do with test instruments and the sporadic signals broadcast by the first stations as they prepared for day-to-day operation.

Neville kept on developing and describing TV receivers for home construction, and they were extremely popular. His memorable 1959 design (August - October 1959) was capable of reception every bit as good as the best commercial models then available, and was built with great success by many hundreds of delighted readers.

This wonderfully productive **partnership** continued until the beginning of 1960, when John Moyle returned very ill from an overseas trip and was diagnosed with cancer. He died in hospital shortly after, and Neville found himself again running the magazine alone — this time as Editor.

Unfortunately he soon experienced a **health trauma of his own** — although luckily much less severe. As he related in 1988:

While working on a project in my backyard 'shack', I hurried out into the damp and wintry night, slipped on

a wet concrete step and ended up with a broken femur. Next morning, my wife had to ring assistant editor Phil Watson with the news that I would be in traction for an indeterminate number of weeks, and that he'd have to be the new instant editor!

So while, for the next four months, I wrote and edited what I could, propped up on pillows, it fell to Phil to make the on-the-spot editorial decisions.

Needless to say Neville was back at the office (and working in the backyard shack) as soon as he was able to do so

ties of all the necessary componentry: keyboard and pedalboard assemblies, oscillator and filter components, cabinets and so on. However just before full-scale manufacture was to begin, management decided that the project was too risky and decided to 'pull the plug'. This of course still left them with a dilemma: how to clear that large stock of organ components.

When Neville Williams heard of their plight, he immediately suggested a solution: How about letting him adapt the original design into an expandable DIY



Taken at the testimonial dinner given in July 1983 to mark to mark his retirement, this picture shows Neville Williams being presented with a VZ-200 computer and word processor by Jim Rowe, on behalf of Dick Smith Electronics.

— although initially with the aid of crutches, and then a stick. It took quite a while for the leg to fully recover, and for some time he walked with a slight limp.

Before long, though, he was deeply involved in developing a major new project: the Stromberg-Playmaster Electronic Organ, presented in the November 1961 - August 1962 issues.

Neville had always had a deep interest in organs and organ music, perhaps as a result of his involvement with the church. However until then building one's own organ (pipe or electronic) had been a project well beyond the reach of both magazine editors and their readers — and really only practical for a handful of 'serious' enthusiasts with well-equipped workshops and huge amounts of time and patience.

But in mid 1961, an opportunity arose. Local firm Stromberg-Carlson (A/sia) had planned to manufacture and market a small spinet-type electronic organ, and had bought in large **quanti-**

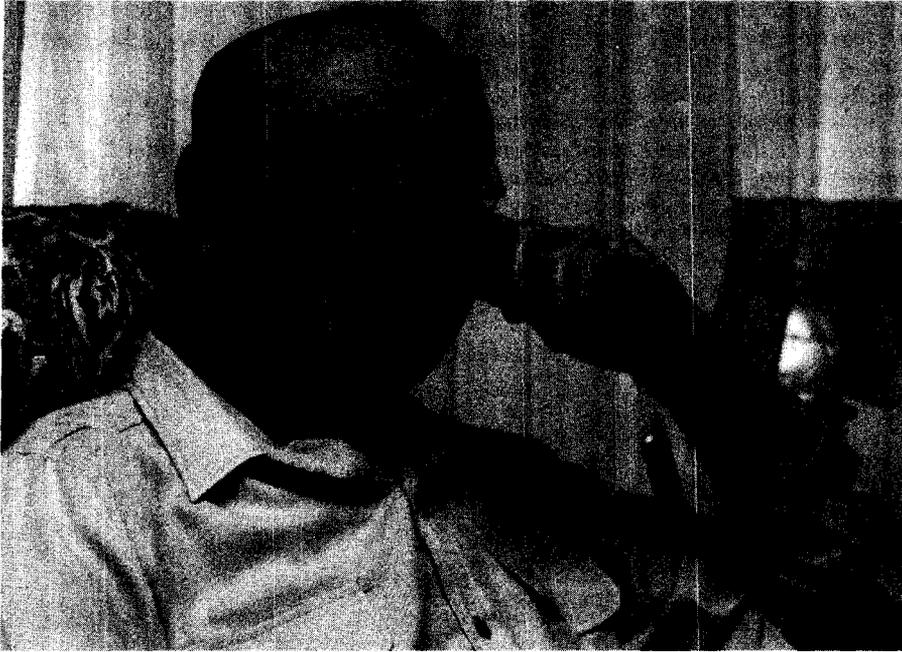
design for home construction, and make the components available as a kit?

Needless to say Strombergs were delighted with the idea, and the rest is history. Stromberg-Playmaster organs were built in large numbers, and ended up providing music in homes, churches and clubs around Australia.

As time went on and technology kept on changing, the magazine inevitably had to keep adapting to the changing needs of its readers. Calmly and carefully, Neville saw to it that the correct changes were made. With the April 1965 issue its name was changed to *Electronics Australia*, and leading by example he encouraged each staff member to keep both themselves, the magazine and its readers abreast of developments. We were all kept busy learning in turn about transistors, integrated circuits, digital logic and computer technology.

None of this was done in an imperious manner — that wasn't Neville's style at

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A photo of Neville taken at the same session as the one we used in the heading for his very popular 'When I Think Back' column.

all. His was more the 'softly, softly' approach: drawing your attention to interesting new articles and papers, encouraging you to follow your natural curiosity and enthusiasms, quietly helping you with advice and suggestions if you struck difficulties, and gently complimenting you if and when it all turned out well.

Of course the magazine's staff gradually changed over the years, with some people moving on and new people joining. But throughout it all Neville Williams remained calmly at the helm. Along the way he became Editor in Chief, as *EA* spawned other titles: first the short-lived *Modern World*, then *Electronics News* (now part of Reed Business Press), and later *Video Mag*.

Eventually, though, it was time to retire from full-time work on the magazine. On July 27, 1993 he was given a big retirement/testimonial dinner, hosted by then Editor Leo Simpson and Mr John B. Fairfax — Chairman of the Board of the magazine's then publisher, Magazine Promotions. (Mr Fairfax is nowadays still associated with the magazine, as co-proprietor of Federal Publishing and its parent company General Newspapers.) The dinner was attended by a great many people from the industry as well as current and former staff members and contributors, and showed the enormous regard in which he was held by all.

Needless to say, though, after so many years of involvement with the magazine Neville couldn't simply stop and 'take up fishing'. One of his retirement gifts was a small computer and word processor, which he immediately proceeded to put to use as a regular freelance contributor. As well as continuing to conduct his long-running 'Forum' discussion column (which he had begun back in September 1950, as 'Let's Buy and Argument'), he also kept turning out a steady stream of articles on hifi topics, theory and new developments in video technology.

In February 1989, soon after the 'Forum' baton had been passed to myself, he began writing a series of articles on early technology and those who developed it — the 'When I Think Back' series, which generated a great deal of interest among readers of all ages. His **WITB** articles continued with very few breaks until last month's instalment, and like many of his previous articles some were turned into a very successful book: *Australia's Radio Pioneers* (Federal Publishing, 1994).

Among the other books that he had written, either solely or jointly over the years were *Basic Electronics* (which sold well over 50,000 copies) and *HI-FI: An Introduction* (Federal Publishing, 1991 and 1994), which sold over 30,000 copies. As technical books go, in the Australian market, they were all undoubtedly 'best sellers' and helped huge num-

bers of readers understand the basic technology of electronics and hi-fi.

Illness strikes

Apart from the broken leg in 1960, Neville had always enjoyed very good health. However in September 1994, he somehow contracted a very serious illness — the cyto-megalo virus or 'CMV', which causes one's red blood cells to self-destruct. Twice he almost died, but after many blood transfusions and a lot of effort by the medical staff at Sydney's Royal North Shore Hospital, he pulled through and began a long but steady recovery. Together with his family and many friends he was very grateful for what they described as "the gift of extra time".

But sadly the gift was all too brief. The bout with CMV had left him very weak physically, and with serious ongoing complications. Then a couple of months ago he was unlucky enough to fall again, breaking his leg in almost the same place as in 1960. There were further complications, and **finally** it was more than even his impressive personal resources could handle. He passed away quietly in Sydney's Westmead Hospital on November 7, 1996, at the age of 81.

No one's life can be adequately described in a few brief pages, but hopefully the foregoing may have given you at least an impression of the life and many achievements of this widely respected man. Needless to say his role as an electronics editor and writer — daunting though it was, spanning an incredible 55 years — was really only one facet of his rich personality. To his wife and family he was a devoted and loving spouse, a wise and helpful father and much loved grandfather; and to his wide circle of friends in the Baptist Church, an unassuming but inspiring and hard-working pillar of practical faith.

To those of us who have had the privilege of working for and with him on the magazine, *he* was also an understanding 'boss' and a very supportive colleague. Above all, to many of us he was also a true mentor, not just in the technical sense but personally as well.

Farewell, Neville. We're really going to miss you — not just the magazine and its staff, but the countless readers whom you've helped so much over those 55 years.

My grateful thanks to Neville's daughter Jenny and his brother Elwyn Williams, for their generous assistance in the preparation of this article. (J.R.)